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# In New Jersey, a Battle Over a Fluoridation Bill, and the Facts

By **KATE ZERNIKE**

For all its renown as an engine of pharmaceutical and biotechnology progress, New Jersey has long lagged in what public health officials call one of the 10 biggest health advances of the last century: fluoridating its water.

While 72 percent of Americans get their water from public systems that add fluoride, just 14 percent of New Jersey residents do, placing the state next to last, ahead of only Hawaii, and far behind nearby New York (72 percent), Pennsylvania (54 percent) and Connecticut (90 percent).

A bill in the Legislature would change that, requiring all public water systems in New Jersey to add fluoride to the supply. But while the proposal has won support from a host of medical groups, it has proved unusually politically charged.

Similar bills have failed in the state since 2005, under pressure from the public utilities lobby and municipalities that argue that fluoridation costs too much, environmentalists who say it pollutes the water supply, and antifuoride activists who argue that it causes [cancer](#), lowers I.Q. and amounts to government-forced medicine.

Public health officials argue that the evidence does not support any of those arguments — and to the contrary, that fluoridating the water is the single best weapon in fighting [tooth decay](#), the most prevalent disease among children.

But they also say they are fighting a proliferation of misleading information. While conspiracy theories about fluoride in public water supplies have circulated since the early days of the [John Birch Society](#), they now thrive online, where anyone, with a little help from Google, can suddenly become a medical authority.

“In the age of the Internet, it’s very easy to spread many of these rumors,” said Barbara F. Gooch, the associate director for science in the Oral Health Division of the Centers for

Disease Control and Prevention. “People go looking for information about why this is bad, and they find it pretty easily.”

So while William Bailey, the acting director of the Oral Health Division and the chief dental officer of the [United States Public Health Service](#), calls it “the ideal public health measure,” opponents online argue the unproven allegation that the Nazis used fluoride to sedate concentration camp victims.

Jennifer DiOrio, a high school teacher who lives in Bedminster, said she began reading about fluoride online recently after a neighbor mentioned concerns, and now she tells colleagues and others the dangers of the legislation. “They are medicating us without our consent, and it’s unethical and illegal,” she said.

Grand Rapids, Mich., became the first community in the United States to fluoridate its water, in 1945. The practice spread after a study showed that children there had 50 percent to 70 percent less tooth decay over the next 15 years than children in communities without fluoridated water.

Since then, many other studies have shown that adding fluoride to water decreases tooth decay by an additional 25 percent, on top of the benefit from twice-a-day brushing, for children and adults. Water providers would typically pass on the cost to customers, but the C.D.C. says that every dollar spent on fluoridating water saves \$38 in dental costs.

The federal government’s Healthy People 2020 initiative aims to have 80 percent of Americans receiving fluoridated water within the next eight years. Twelve states have laws providing for statewide fluoridation, the C.D.C. said.

In New Jersey, water providers typically serve several towns, meaning that all must agree to fluoridate their water — and typically they do not.

Opponents and supporters of the fluoride legislation believe it has a higher chance of passing this year, in part because it has bipartisan sponsorship. Gov. Chris Christie has not said whether he would sign the bill if it passed.

The state’s [League of Municipalities](#) has opposed the bill, concerned about the cost of what it calls an unfunded mandate. The [New Jersey Utilities Association](#) testified against it, arguing that it “is known to have adverse health effects in certain quantities” and that it would cost water companies anywhere from \$400,000 to \$64 million.

“We think the cost benefit is not there,” said Karen Alexander, the president of the association.



Many opponents say their information has come online, from national groups like the [Fluoride Action Network](#) and [Citizens for Safe Drinking Water](#), which argue that fluoridation would cost \$5 billion statewide. On their Web sites, the groups argue that fluoridation would lead to fluorosis, a rare staining of the teeth. They say fluoride has many adverse health effects, including bone cancer, and no proven benefit.

But public health officials say that the [National Academy of Sciences](#) examined the studies linking fluoride to lowered I.Q. and could not substantiate them. Similarly, two large and recent studies, one from Harvard and the National Cancer Institute, the other in California, found no link between fluoride and bone cancer. Fluorosis in the United States, they say, tends to be barely visible.

“The opposition can point to one or two studies that say this or that,” said Dr. Bailey, of the C.D.C. “We look at the overall weight of the evidence and what expert panels have said.”

There are several ways to fluoridate water, depending on the water system, said Kip Duchon, the national fluoride engineer for the C.D.C. But they are not cost-prohibitive, and most are simple, he said.

Jared Martin, 27, who started a No Fluoride New Jersey page on Facebook after reading about the bill and fluoride online, acknowledged that there was evidence to support fluoridation.

“That’s the thing,” he said. “When you’re searching the Internet, it depends where you’re looking.” But he was made suspicious, as were many opponents, when the federal Department of Health and Human Services revised the recommended level of fluoride in water to avoid the possibility that children would receive too much. The recommended level had been 0.7 to 1.2 milligrams per liter; the department last year advised that it not exceed the lower end of that range.

In the last four years, about 200 municipalities nationwide have stopped fluoridating the water. Antifluoride groups cite this as evidence that more people are acknowledging the dangers.

But many of those places ceased for financial, not health, reasons. And nationwide, the trend has been toward more people receiving fluoridated water. San Diego, long the largest city not to fluoridate, began doing so last year. Atlantic City also did so, citing the health benefits.

Some opponents argue that the state could less expensively fight tooth disease by promoting good toothbrushing or fluoride treatments in schools.

But Senator Joe Vitale, a sponsor of the legislation in New Jersey, said, “That’s not going to happen in cities like Newark or Camden or Paterson, where they can barely keep the lights on.”

Cavan Brunsden, a pediatric dentist in Old Bridge and a supporter of the bill, noted that many states went further — New York, for instance, has begun requiring dental visits as a condition of attending school.

Not fluoridating the water, he said, is “an egregious example of the state not fulfilling the health care needs of its citizens.”

“It reduces decay whether you live in Newark or Short Hills,” he said. “Science has proven it. It’s unfortunate that science isn’t part of the debate.”